

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP 2004/016482

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> H01M 4/58, 4/02, 10/40

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> H01M 4/58, 4/02, 10/40

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
 Japanese Utility Model Gazette 1922-1996, Japanese Publication of Unexamined Utility Model Applications 1971-2004, Japanese Registered Utility Model Gazette 1994-2004, Japanese Gazette Containing the Utility Model 1996-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 11-54123 A, (MATSUSHITA ELECTRIC IND CO LTD), 1999.02.26, claim 1-6, examples & WO 98/54779 A1 & EP 917228 A1 & US 2002/61445 A1	1-34
A	JP 2003-173778 A, (KAWASAKI STEEL CORP), 2003.06.20 claims 1-8, examples & WO 2004/11370 A1	1-34
A	JP 2002-87807 A, (HITACHI MAXELL K.K.), 2002.03.27 claims 1-4, examples (no family)	1-34
A	JP 11-343108 A, (OSAKA GAS CO LTD), 1999.12.14, claims 1-10, example 3, 8 & WO 97/18160 A1 & EP 861804 A1 & CN 1202142 A	1-34



Further documents are listed in the continuation of Box C.



See patent family annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

07.01.2005

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,A	JP 2004-79344 A, (TOKAI CARBON K.K.), 2004.03.11 claim1, examples (no family)	1-34
P,A	JP 2004-210634 A, (JFE CHEM CORP), 2004.07.29 claims1-28, examples & WO 2004/56703 A1	1-34
A	JP 11-154513 A, (MATSUSHITA ELECTRIC IND CO LTD), 1999.06.08 claims1-8, examples & EP 903799 A2 & US 6420070 B2	1-34
P,A	JP 2004-220926 A, (MATSUSHITA ELECTRIC IND CO LTD), 2004.08.05 claims1-3, examples (no family)	1-34